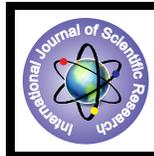


Antoine François Fourcroy (1755-1809), Doctor and Imperial Count, Reformer and Advocator of The University-Hospital Education in France



Education

KEYWORDS :

Xavier Riaud

Antoine François Fourcroy (Corlieu, 1896, © BIUM).

Antoine François Fourcroy was born on June 15th 1755, in Paris. His mother died when he was only 7 years old. Fourcroy was the son of an apothecary who worked in the house of the Duke of Orleans. While he was finishing his medical studies in the French capital city, his father lost his job position. In 1769, Antoine was obliged to leave the school of Harcourt. His father taught his children how to write to earn a living. Vicq d'Azir, the famous anatomist, persuaded Antoine Fourcroy to contemplate a medical career and to settle him as a tutor during his lectures. He also allowed him to work in his laboratory (Napoleon Foundation, 2008). On October 12th 1775, he was made Master of Arts. On April 11th 1778, he took the Bachelor's oath (Viel, 2003). He was refused a grant as his family was close to Vicq d'Azir, a zealous servant of the Royal Society of Medicine, the immediate rival of the Faculty of Medicine. Vicq d'Azir asked the Faculty's members to reconsider their decision and got subsidies which allowed Fourcroy to pay the end of his studies. For better or for worse, the Faculty complied and let the young man end his studies. And yet, Fourcroy was not allowed regency, depriving him of the possibility to teach (Lemaire, 1992). Fourcroy became a doctor in medicine on September 28th 1780 (Dupont, 1999). Jean-Baptiste Bucquet, a providential man and chemistry teacher in the Faculty of Medicine in Paris, always supported him but he died that same year (Feltgen, 1994). In October 1780, he was appointed member of the Royal Society of Medicine whereas he had taken a written oath six months before implying that he would never join it (Viel, 2003). In 1782, he published his first work and in 1783, he taught general physics and chemistry at the Royal Veterinary School of Artford. And yet he gave physiology lectures and wrote a book of applied therapeutics. Buffon entrusted him with the Chair of Chemistry at the "Jardin du roi" in 1784. There, Fourcroy shared his knowledge until his death. However, his medical concerns were far from being over. On May 11th 1785, he was elected member of the Academy of Sciences and that same year, he taught medical material (Dupont, 1999 ; Feltgen, 1994).

In December 1791, he chaired the societies of medicine and agriculture (Grison, 2000 ; Kersaint, 1966).

A shrewd politician, he was part of the drafting of the books of the Third Estate ("cahiers du Tiers état") in 1789. As he became a member of the Natural History Society, he demanded the demonstration of a supreme sense of patriotism and duty in order to join it. Similarly, on August 25th 1792 at the Academy of Sciences, he asked for the banishment of his migrating fellows, a demand that the Academy immediately refused arguing the fact that only a minister was able to decide such an issue. On April 1792, he was appointed at the salt-peter and gun-powder commission of which he soon became the chairman. On August 3rd 1793, the Convention voted the compulsory closure of all the Academies and learned societies. Therefore, the Academy of Sciences was cancelled. Fourcroy was directly involved in this political measure. Moreover, he actively supported Marat and his ideas as he joined his list. Through frequent withdrawals and Marat's assassination, he was elected the alternate fourth member and he found himself sitting at the Convention where his talents as an orator allowed him to

stand out on July 25th 1793 (Lemaire, 1992 ; Feltgen, 1994). He quickly joined the Committee of Public Instruction on July 30th. He even became its chairman. The "Jardin du roi" was enlarged and logically became the National Museum of Natural History (Dupont, 1999). This fine politician's motto was: "create anarchy to restore order". This was the way he conducted things when he reformed the hospital-university teaching (Lemaire, 1992). He was appointed Secretary of the Convention and managed the Jacobin Club from December 1st to December 17th 1793 (Feltgen, 1994). He offered to reform public education by replacing Latin with French, defended free tuition for all students, the teacher's recruitment solely via competitive examinations and fought against the multiple positions of professors. He wished to merge medicine and surgery, and advocated for the creation of three major hospitals (Dupont, 1999). On September 1st 1794, he joined the public welfare committee where he sat until June 3rd 1795 (later on, he was reintegrated into the Committee of Public Instruction). Thus, on November 22nd 1794, he suggested the implementation of a military health school devoted to the servicemen who were disarmed in the medical sector. On the front lines, health disaster reached a level never seen before. On December 4th, by dint of highly skilful strategic political manoeuvres, Fourcroy succeeded in making the Convention vote a law which aimed at implementing medical schools in Paris, Strasbourg and Montpellier. Without assessing the scope of its decision, the Convention had just rehabilitated medical schools reluctantly. Straight away, Fourcroy launched the building of these three schools which perfectly collaborated with the adjoining hospitals (Lemaire, 1992). There, tuition was free, the teachers obtained a job position only after a competitive examination, worked there full-time and the diplomas were national (Dupont, 1999). Teaching was mainly about hands-on activities. Nothing has really changed ever since. The graduates were given priority to work in the military hospitals. Fourcroy was professor of chemistry and pharmacy at the Health School of Paris which had just been created (Grison, 2000 ; Kersaint, 1966). Lectures only started in April 1795 (Feltgen, 1994). His positions allowed him to save Desault (May 1794), Chaptal (September 1793) Vicq d'Azir and D'Arcet from being guillotined. However, he failed to save Lavoisier. Some said that he did not put the same zeal into defending the latter as he did for the others, despite his great skills as an orator. However, Cuvier, during his praise of January 7th 1811, firmly attested that there was no way of verifying such assertion.

Fourcroy actively advocated for new institutions such as the Polytechnic School thus called from September 1st 1795, the former central school of public works adopted by the Convention on September 24th 1794, where he taught as soon as it opened its doors on December 21st 1794 (<http://cths.fr>, 2010 ; Feltgen, 1994). He taught chemistry every day during a month and was soon helped by his assistant Vauquelin, with whom he shared his teaching activities and published a book in 1783. In December 1795, he joined the Institute at the chemistry department, as soon as it was created. He became its chairman in 1797 (Napoleon Foundation, 2008).

Then, he was appointed as a member of the Council of Elders by the Sarthe department on November 1795, where he sat until May 20th 1797.

On October 2nd 1796, Fourcroy was elected free associate member of the Free Society of Pharmacy of Paris. He became a resident member on December 5th 1796 (Viel, 2003). After 18 Brumaire, Bonaparte appointed him to the position of State Councillor on December 25th 1799 and gave him full responsibility over the public instruction on September 20th 1802 (Dupont, 1999 ; Grison, 2000 ; Kersaint, 1966). Therefore, he renounced to his salary as a professor. He worked on the implementation of six medical schools, pharmacy schools, twelve law schools, around thirty high-schools and 300 community colleges. Despite the vastness of the duty, he successfully conducted it.

In 1801, he was sent to the Vendée to examine the situation on the ground, after the temporary peace agreements secured in the region by Bonaparte (<http://fr.wikipedia.org>, 2010 ; Feltgen, 1994). During his trip, he wrote a report on the civil hospices and the abandoned children (Feltgen, 1994).

From 1802, Fourcroy actively advocated for a reformed medical system and bore a large responsibility for the law dated 19 ventôse of the year XI (March 10th, 1802) which set the duration of the medical studies and the examination and thesis defense-oriented syllabus. (Grison, 2000 ; Kersaint, 1966). The law dated April 11th 1803, advocated by Fourcroy, led to the creation of three Schools of Pharmacy: Paris, Montpellier and Strasbourg. Fourcroy also played an active part in teaching activities (Viel, 2003).

He was made Knight of the Legion of Honour on September 2nd 1803, then Commander on June 14th 1804.

Napoleon, who was more nit-picking, made him rewrite 23 times the final texts establishing the Imperial University which was enacted on May 10th 1806 and only officially adopted by the State council on March 5th 1808. The decree n° 3179, which organised it, was only signed by Napoleon on March 17th 1808. The hospital-university education saw the light of day with this decree. Napoleon never liked Fourcroy and did not hesitate to harass him. However, aware of the reform he had just undertaken and the hard work he had performed, he appointed him Imperial Count on April 26th 1808 but never appointed him as chairman of the University, which the doctor saw as humiliation and he never recovered from this. On December 31st 1808, he left his position as chairman of the Public instruction. In the end, once the text was approved, Fourcroy, who had consumed his final strength, died of a heart attack in Paris on December 16th 1809 (Lemaire, 1992). Napoleon wanted him to take the overall direction of the Mines. He had provided him an annual pension of 10 000 Frs until his death (Feltgen, 1994). He was buried in the Père-Lachaise cemetery (11th division) (Landru, 2008).

Despite being a brilliant and conceited orator and in spite of being concerned by his fame and looks, Fourcroy never did something out of jealousy and never sought power for power. He cared about public welfare, never hesitated to devote his full abilities to the performance of his duties and power to defend the ideas he cherished. These are the reasons why Napoleon solicited him, as well as for his skills of administrator and organizer (Grison, 2000 ; Kersaint, 1966). Napoleon kept two of Fourcroy's books in his library of the island of Elba: *A General System of Chemical Knowledge; And Its Application to the Phenomena of Nature and Art* (Paris, an

IX-X) and *The Philosophy of Chemistry, or Fundamental Truths of Modern Chemical Science, Arranged in a New Order* (1792).

That goes to show how worthy Fourcroy's works were, given the Emperor's enmity towards him (Napoleon Foundation 2008). He was an unparalleled chemist whose monumental work was consecrated by his peers. He was a much valued chemistry professor with a rare eloquence. He was a politician who dedicated his life in the service of others and the ideas he thought was right.

References:

1. Bibliothèque Interuniversitaire (BIUM) [Inter-university Health Library], personal communication, Paris, 2010.
2. Corlieu Auguste, *Centenaire de la Faculté de Médecine de Paris (1794-1894)* [Centenary of the Faculty of Medicine in Paris], Alcan – Baillière – Doin – Masson (ed.), Paris, 1896.
3. Dupont Michel, *Dictionnaire historique des Médecins dans et hors de la Médecine*, Larousse (ed.), Paris, 1999.
4. Feltgen, « Antoine François de Fourcroy », in *CHU – Hôpitaux de Rouen*, séance du 16 mars 1994, www3.chu-rouen.fr, pp. 1-15.
5. Fondation Napoléon, « Fourcroy Antoine-François, comte de (1755-1809), chimiste, conseiller d'Etat », in <http://www.napoleon.org> [Fourcroy Antoine-François, Count (1755-1809), chemist, State Councillor], 2008, pp. 1-3.
6. Grison Emmanuel, « Fourcroy », in *Bulletin de la Société des Amis de la Bibliothèque de l'Ecole Polytechnique*, avril 2000, vol. 23, <http://www.sabix.org>, pp. 1-5.
7. <http://cths.fr>, *Fourcroy Antoine François*, 2010, pp. 1-2.
8. <http://fr.wikipedia.org>, *Antoine-François Fourcroy*, 2010, pp. 1-3.
9. Landru Philippe, « Fourcroy Antoine de (1755-1809) », in <http://www.landrucimetieres.fr>, 2008, p. 1.
10. Kersaint Georges, *Antoine-François de Fourcroy (1755-1809). Sa vie, son œuvre*, du Muséum [Antoine-François de Fourcroy (1755-1809). His life, his work], (ed.), Paris, 1966.
11. Lemaire Jean-François, *Napoléon et la médecine* [Napoleon and medicine], François Bourin (ed.), Paris, 1992.
12. Viel Claude, « Antoine-François de Fourcroy (1755-1809), promoteur de la loi de Germinal an XI » [Antoine-François de Fourcroy (1755-1809), initiator of the law Germinal Year XI], in *Revue d'histoire de la pharmacie*, 2003 ; n° 339 : 377-394.
13. (*) Dental Surgeon, Doctor in Epistemology, History of Sciences and Techniques, Laureate and national associate member of the National Academy of Dental Surgery, Free member of the National Academy of Surgery.